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(19) (CA) APPLICATION FOR CANADIAN PATENT (12)

- (54) Shoe
- (72) Schoch, Robert Germany (Federal Republic of); Tress, Werner - Germany (Federal Republic of); Hammer, Jakob - Germany (Federal Republic of);
- (71) PDS Verschlusstechnik AG Switzerland;
- (30) (DE) P 43 05 671.7 1993/02/24
- (57) 12 Claims

Notice: This application is as filed and may therefore contain an incomplete specification.

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#### Claims

- 1. Shoe, comprising
- a) a flexible upper (21, 22) which has in the instep region (3, 23) two parts (1a, 1b, 21a, 21b) which can be braced relative to one another as well as a rear stiffening heal cap (4, 24),
- (1. 21) and having a fastener housing (6), a cable pulley (7) which is rotatably mounted and drivable in the fastener housing, a rotary actuating knob (8) as well as one single tension cable (9) which is guided by way of cable-deflecting guides (10) provided on the parts of the upper and can be wound onto the cable pulley and unwound from this cable pulley for the purpose of reciprocal drawing together and loosening of these parts of the upper.

characterised by the combination of the following features:

- c) the heel cap (4, 24) has in its central rear region (4a) a raised extended portion (13) which is constructed as a fastener support to accommodate and fix the rotary tensioning fastener (5);
- d) a loop (9b) formed from the tension cable (9) extends from the rotary tensioning fastener borne by the heel cap (4, 24) and passes around the foot (18) and over a lacing section (11) in the instep region (3,23).
- 2. Shoe as cleimed in Claim 1, characterised in that a fastener-receiving recess (14) is made so that it is aligned centrally with respect to the vertical longitudinal central axis (A) of the shoe in the extended portion (13) of the

heel cap (4, 24), and the fastener housing (6) is received in a form-locking manner and fixed in this recess.

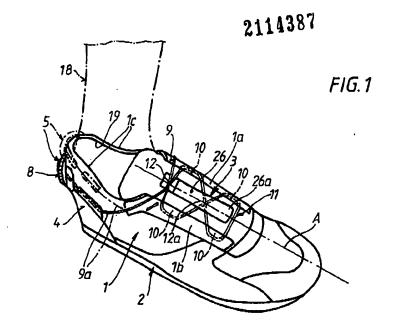
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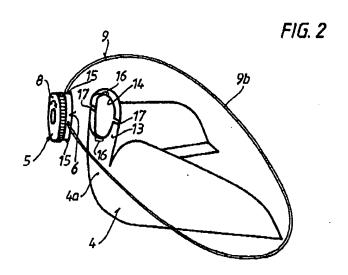
- 3. Shoe as claimed in Claim 2, characterised in that the heel cap (4) including the extended portion (13) is produced from a relatively firm but still somewhat flexible material, particularly synthetic material, and the fastener housing (6) can be snapped into engagement in the fastener-receiving recess (14) and released by gentle bending of the heel cap.
- 4. Shoe as claimed in Claim 2, characterised in that guides (17) for the tension cable (9) are made in lateral regions of the extended portion (13) which lie approximately diametrally opposite one another with respect to the fastener-receiving recess (14).
- 5. Shoe as claimed in Claim 2, in which at least the heel cap (4, 24) is covered with an outer material (15) used for the upper (1, 21), characterised in that the rotary tensioning fastener (5) is built into the fastener-receiving recese (14) of the heel cap (4, 24) to such a depth that only the rotary actuating knob (8) of the fastener which has a relatively shallow curve projects over the outer material (25) towards the outside.
- 6. Shoe as claimed in Claim 2, characterised in that the fastener-receiving recess (14) with the rotary tensioning fastener (15) is disposed in the region above the actual heel (18a) of the foot (18).
- 7. Shoe as claimed in Claim 6, in a construction with a high upper, characterised in that the heel cap (24) is also extended upwards on its side parts in such a way that stabilising supports (24a, 24b) are formed at least in the region of the ankle (20).

- 8. Shoe as claimed in Claim 7, characterised in that the loop (9a) of tension cable is guided along on the outer faces of the stabilising supports (24a, 24b).
- 9. Shoe as claimed in Claim 2, in a construction in the form of a half-shoe, characterised in that the loop of cable (9a) is guided along in the region below the edge (1c) of the upper surrounding the opening (19) through which the foot enters the shoe.
- 10. Shoe as claimed in Claim 1, characterised in that the lacing section (11) with crossing portions of tension cable for the two parts of the upper (1a, 1b) is aligned substantially centrally with respect to the instep region (3) and symmetrically with respect to the longitudinal central axis (A) of the shoe, and an approximately strip-shaped pull-flap (26), which has at least one gripping end (26a) for pulling this uppermost tension cable crossover point (12) off from the instep region, is placed at least below the uppermost tension cable crossover point (12).
- 11. Shoe as claimed in Claim 10, characterised in that the part of the pull-flap (26) located below the tension cable crossover point (12) forms a sliding guide support for the portions of tension cable.
- 12. Shoe as claimed in Claim 10, characterised in that the gripping end (26a) of the pull-flap (26) can be releasably fixed on the outer face of the upper (1) in the lacing section (11).

#### Abstract

The invention relates to a shoe which comprises a flexible upper with parts of the upper which can be braced relative to one another in the instep region and with a heel cap provided at the rear as well as a rotary tensioning fastener borne by the upper with a tension cable which can be wound onto a cable pulley and unwound therefrom for the purpose of reciprocal drawing together and loosening of the parts of the upper. An attachment of the rotary fastener which is particularly favourable in production terms as well as a particularly good drawing together of the corresponding parts of the upper is achieved by constructing the heel cap in its central rear region with a raised extended portion to receive and fix the rotary tensioning fastener.





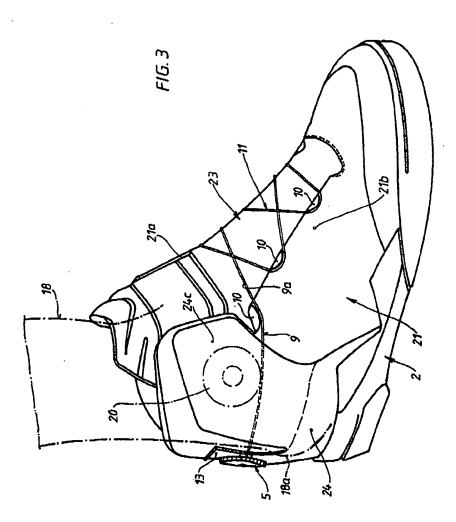


FIG. 4

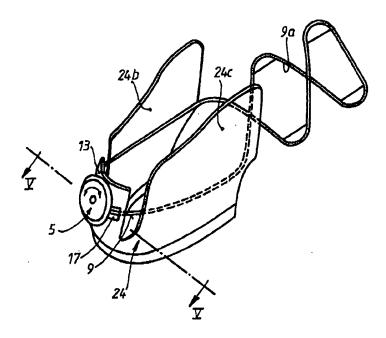


FIG. 5

